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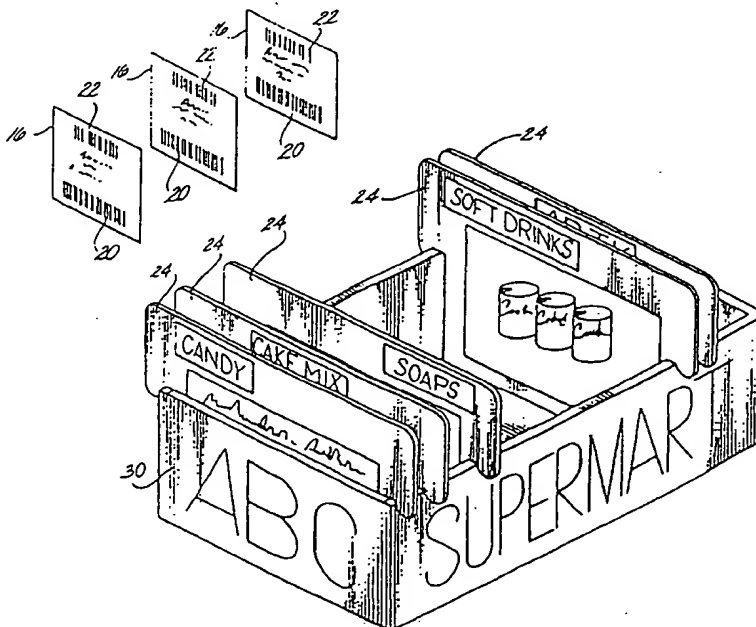
## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(21) International Application Number: PCT/US94/05605 (22) International Filing Date: 19 May 1994 (19.05.94) (30) Priority Data: 08/065,218          19 May 1993 (19.05.93)          US (71)(72) Applicant and Inventor: HYUN, David, K. [US/US]; 655 North Sunny Slope Avenue, Pasadena, CA 91107 (US). (74) Agent: RAHN, LeRoy, T.; Christie, Parker & Hale, P.O. Box 7068, Pasadena, CA 91109-7068 (US).	(81) Designated States: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).  Published With international search report.	

(54) Title: METHOD AND PRODUCT FOR ORGANIZING, STORING AND TRACKING CENTS-OFF COUPONS

## (57) Abstract

A bar code (20) uniquely identifying a single user or user group is printed on a plurality of cents-off coupons (16) naming various products. A plurality of file dividers (24) are inserted in a coupon storage container (30) to form separate compartments for coupon storage. The coupons are placed in the compartments sorted by product. The coupons are selectively removed from the compartments for the purpose of redemption. The bar code printed on the coupons is optically read (32) in the course of purchasing products named on the coupons to generate data about the user or user group. The divider cards can also have printed thereon a bar code (20) uniquely identifying the user or user group. The coupons and/or divider cards can have printed thereon a bar code (22, 29) identifying the particular product named on the respective coupons and/or divider cards.



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products named on the coupons to generate data about the user or user group.

Another aspect of the invention is a kit for storing cents-off coupons in an organized manner. A substantially flat blank is foldable into a storage bin. A plurality of divider sheets each have defined therein at least one divider card. The divider cards from the plurality of dividers sheets are insertable into the storage bin, thus separating the storage bin into individual compartments. A bar code uniquely identifying a single user or user group is printed on a plurality of cents-off coupons. Preferably, the blank, the divider sheets, and the coupons are wrapped in a plastic cover and are dimensioned to fit into a conventional brown paper shopping bag.

As a feature of the invention, the divider cards can also have printed thereon a bar code uniquely identifying the user or user group.

As another feature of the invention, the coupons and/or divider cards can have printed thereon a bar code identifying the particular product named on the respective coupons and/or divider cards.

The described system enables product manufactures and their advertising agencies to effectively advertise their products and to track consumer habits and practices.

**Brief Description of the Drawings**

The features of specific embodiments of the best mode contemplated of carrying out the invention are illustrated in the drawings, in which:

FIG. 1 is a perspective view of a coupon storage device kit showing one side of the kit in its unassembled configuration.

FIG. 2 is a perspective view of one of the sheets of coupons that comprise part of the kit of FIG. 1;

FIG. 3 is a perspective view of one of the sheets of dividers that comprise part of the kit of FIG. 1;

FIG. 4 is a perspective view of the coupon storage device assembled from the kit of FIG. 1;

FIG. 5 is a front and back view of a registration card that comprises part of the kit of FIG. 1;

and

FIG. 6 is a schematic diagram of a point of sale terminal reading the bar codes on a coupon from the kit of FIG. 1.

Detailed Description of the Specific Embodiment

The disclosures of U.S. Patents 4,795,196 and 5,060,793 are hereby incorporated fully by reference.

In FIG. 1 is shown a consumer product coupon storage device kit which comprises a blank 10, a plurality of divider sheets 11, and one or more sheets of cents-off coupons 12 wrapped in a transparent plastic cover 13. A registration card 14 is secured to the outside of cover 13 by glue, staples, or other means. Preferably, the kit has exterior dimensions that permit it to be placed in a conventional brown paper shopping bag 15 for carrying by the consumer. An identical registration card (not shown) is also included inside plastic cover 13 as a backup to card 14. A bar code 20 is printed on the surface of plastic cover 13. Bar code 20 represents a particular user or user group, preferably in UPC. A unique bar code is used for a particular user or user group such as a group of users in a certain geographic location or users having a certain ethnic background or income characteristics. Every other user or user group has its own unique bar code so that the buying patterns of the various users and user groups can be tracked.

As shown in FIG. 2, sheet 12 comprises a plurality of cents-off coupons 16 framed by perforations 18 to facilitate separation of the individual coupons from sheet 12. The names of different brand name products are printed on coupons 16. When the consumer shops in a retail establishment, the consumer separates the coupons for the brand name products he or she purchases and redeems the coupons to claim a price discount.

The same user or user group unique bar code 20 is also printed on each of coupons 16. An optional bar code 22, which is different for each brand name product, is also printed on coupons 16. Bar code 22 identifies the particular brand name printed on the coupon, preferably in UPC.

As shown in FIG. 3, divider sheets 11 each preferably have four individual file dividers 24 printed thereon. File dividers 24 are framed by perforations 26 to facilitate separation from sheet 11. Dividers 24 are dimensioned to fit into the interior space of a storage bin described below, which is assembled from blank 10 in the manner described in U.S. Patent 5,060,793.

Each divider 24 has a first visible field 27 adjacent to the top edge of the divider and a second field 28 that covers most of the rest of the surface of the divider. A different generic product descriptor is printed in the first field 27 of each divider. A brand name product advertisement is printed in the second field 28 of each divider. The brand name product belongs to the class of the generic product descriptor printed on the divider. For example, FIG. 3 shows divider cards having generic product descriptors of "SOFT DRINKS," "CAKE MIX," "CANDY" AND "SOAP." The advertisement printed on the divider having a generic descriptor of "SOFT DRINKS" is for COCA COLA brand soft drink. The back of each of the dividers (not shown in the drawings) has a field covering most of the back surface in which a brand name product advertisement is also printed. The brand name product can belong to the class of generic product, the descriptor which is printed on the same divider card as the advertisement of said brand name product, or to the class of the generic product, the descriptor of which is printed on the next adjacent or nearby divider card. Preferably, the same user or user group unique bar code 20 is also printed on each of dividers 28. An optional bar code 29, which is different for each brand name product, is also printed on dividers 16. Bar code

29 identifies the particular brand name advertised on the divider, preferably in UPC. Bar codes 22 and 29 could be printed on the rear side of the dividers, instead of the front side thereof. After a designated date, the dividers are redeemable as coupons. This encourages the consumer to use the dividers as coupons and to obtain a new kit with new coupons and product advertisements. As a result, the described system can be used to introduce new product advertisements on a periodic basis.

Registration card 14 is shown in detail in FIG. 5. The front of registration card 14 has the characteristics of a standard post card--i.e., an addressee, a return address, and a prepaid postage stamp. The back of registration card 14 has the same user or user group unique bar code 20, blanks for the consumer's name and address, and other consumer relevant data such as family size. The consumer is preferably encouraged to mail in the back up registration card with a premium or prize. This permits the issuer of the kits to associate the name and address of the consumer with the unique bar code 20 that is used on his or her kit.

If the kits are distributed at food markets or other retail establishments, the consumer presents his or her kit to the checker at the point of sale in the course of the sales transaction. The checker passes the kit over the optical reader to read bar code 20 on registration card 14 and/or cover 15 and to enter the consumer into the store computer as part of the sales transaction. This provides to the issuers of the coupons proof of the delivery of the coupons to the consumer and thus protects against misredemption of coupons.

To use the kit, the consumer assembles a coupon storage bin 30 from blank 10 as shown in FIG. 4. The consumer also separates file dividers 24 from sheet 11 and places the dividers in bin 10. The top corners of dividers 24 each have downwardly extending hooks that with the remainder of the side edges of the card form notches. The top of the bin has side edges which serve as rails to guide and support dividers 24 as they move parallel to the length of bin 10 and thereby adjust the size of the individual compartments. Bin 10 is deeper than the height of divider cards 24 from the bottom edge to the recess of the notches so that the bottom edge of dividers 24 do not rest on the bottom of bin 10. This serves to hold divider cards 24 in an upright position, i.e. vertical. The consumer then separates coupons 16 from sheet 12 and places coupon 16 in the compartments sorted by product, i.e. the coupons shown in FIG. 4 being in the soap compartment are coupons for different brands of soap. When the consumer shops for merchandise, the consumer selectively removes the coupons from the compartments for redemption and delivers the coupons along with the corresponding brand name merchandise to the checker at the point of sale.

As shown in FIG. 6, the checker passes the coupons to be redeemed across an optical scanner 32 at a point of sale terminal to read bar code 20 and optional bar codes 22 and 29. This data is transmitted to a store computer 34 for storage, tabulation, and eventual analysis of the purchasing habits and practices of the user or user group identified by the unique bar code.

The described embodiment of the invention is only considered to be preferred and illustrative of the inventive concept; the scope of the invention is not to be restricted to such embodiments. Various and numerous other arrangements may be devised by one skilled in the art without departing from the spirit and scope of this invention.

## WHAT IS CLAIMED IS:

1. A method of organizing and tracking cents-off coupons comprising the steps of:  
printing on a plurality of product cents-off coupons naming various products a bar code  
uniquely identifying a single user or user group;  
inserting a plurality of file dividers in a container to form separate compartments for  
coupon storage;  
placing the coupons in the compartments sorted by product;  
selectively removing the coupons from the compartments for the purpose of redemption;  
and  
optically reading the bar code printed on the coupons in the course of purchasing  
products named by the coupons to generate data about the user or user group.
2. The method of claim 1, additionally comprising the steps of:  
printing on an area of the respective file dividers different generic product descriptors;  
and  
printing on another area of the respective dividers different brand-name product  
advertisements, the brand-name product belonging to the class of the generic product, the descriptor  
of which is printed on the same divider as the advertisement of said brand-name product.
3. The method of claim 2, additionally comprising the steps of:  
printing on yet another area of the dividers a bar code uniquely identifying the user or  
user group; selectively removing the dividers from the container for the purpose of  
redemption; and  
electronically reading the bar code printed on the dividers in the course of purchasing  
products named on the coupons to generate data about the user or user group.
4. The method of claim 2, additionally comprising the step of tabulating the data.
5. The method of claim 3, additionally comprising the step of analyzing the purchasing  
characteristics of the user or user group from the data.
6. A consumer-product coupon storage device comprising:  
a coupon storage bin having an open top with side edges and a cubical interior space;  
a plurality of dividers adapted to fit in the bin to separate the space in the bin into  
individual compartments, each divider having first and second visible fields;  
a plurality of product cents-off coupons on which a bar code uniquely identifying a  
single user or user group is printed;  
a generic product descriptor printed in the first field of each divider; and  
a brand-name product advertisement printed in the second field of each divider, the



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brand-name product belonging to the class of the generic product, the descriptor of which is printed on a divider near the advertisement of said brand-name product.

7. The storage device of claim 5, in which each descriptor is printed on the same divider as the advertisement of said brand-name product.

8. The storage device of claim 5, in which the bin has at least one visible field on its outer surface and a retail business advertisement is printed in said field.

9. The storage device of claim 5, in which the bin has four side faces and one bottom face and a retail business advertisement is printed on each face.

10. The storage device of claim 5 in which the same retail business advertisement is printed on each face of the bin.

11. A kit for storing manufacturers coupons in an organized manner comprising:  
a substantially flat blank, the blank being foldable into a storage bin;  
a plurality of divider sheets, each having defined therein at least one divider card, the divider cards from the plurality of divider sheets being insertable into the storage bin thus separating the storage bin into individual compartments; and  
a plurality of product cents-off coupons on which a bar code uniquely identifying a single user or user group is printed.

12. The kit of claim 10, in which the divider sheets have printed thereon a bar code uniquely identifying the user or user group.

13. A kit for storing coupons as recited in claim 11 further comprising a plastic wrap embracing the blank and the plurality of divider sheets.

14. A kit for storing coupons as recited in claim 11 further comprising a plurality of manufacturer coupons insertable into the compartments formed by the storage bin and the divider cards.

15. A kit for storing coupons as recited in claim 13 further comprising a plastic wrap embracing the blank, the plurality of divider sheets and the plurality of manufacturer coupons.

16. A kit for storing coupons as recited in claim 12 wherein the divider cards further comprise a first field for printing a generic product descriptor and a second field for printing a brand-name advertisement.

17. A kit for storing coupons as recited in claim 15 wherein the brand-name advertisement on each card is directed to a product in the class of the generic product descriptor on the card.

18. A kit for storing coupons as recited in claim 12 having dimensions suitable to fit within a shopping bag or a direct mail piece envelope.

19. A kit for storing coupons as recited in claim 11 wherein the kit has exterior dimension that permit it to be placed in a conventional paper shopping bag.

20. A kit as for storing coupons as recited in claim 11 further comprising a grocery bag having an open top and a bottom surface and four side surfaces defining a cubical interior space, the grocery bag having at least one side dimensioned slightly larger than the blank to allow the blank to be inserted into and carried by the bag.

21. A consumer-product kit having component parts capable of being assembled by the consumer for providing a coupon storage device, the kit comprising the combination of:  
a blank adapted to be folded into a storage bin having an open top with top edges and a cubical interior space;

a plurality of divider sheets, each sheet defining at least one removable divider card, the divider cards adapted to be fitted in the bin to separate the space in the bin into individual compartments, each divider card having a first visible field with a generic product descriptor printed therein and a second visible field with a brand-name product advertisement printed therein, each divider card also having top corners with notches into which the side edges of the bin fit; and

a plurality of coupons adapted to be placed into the compartments by the consumer, a bar code uniquely identifying a single user or user group printed on each coupon.

22. A consumer-product kit as recited in claim 21 wherein the blank is initially folded in a substantially flat configuration.

23. A consumer-product kit as recited in claim 22 wherein the blank, in its initially flat configuration, is sized to fit into a conventional shopping bag.

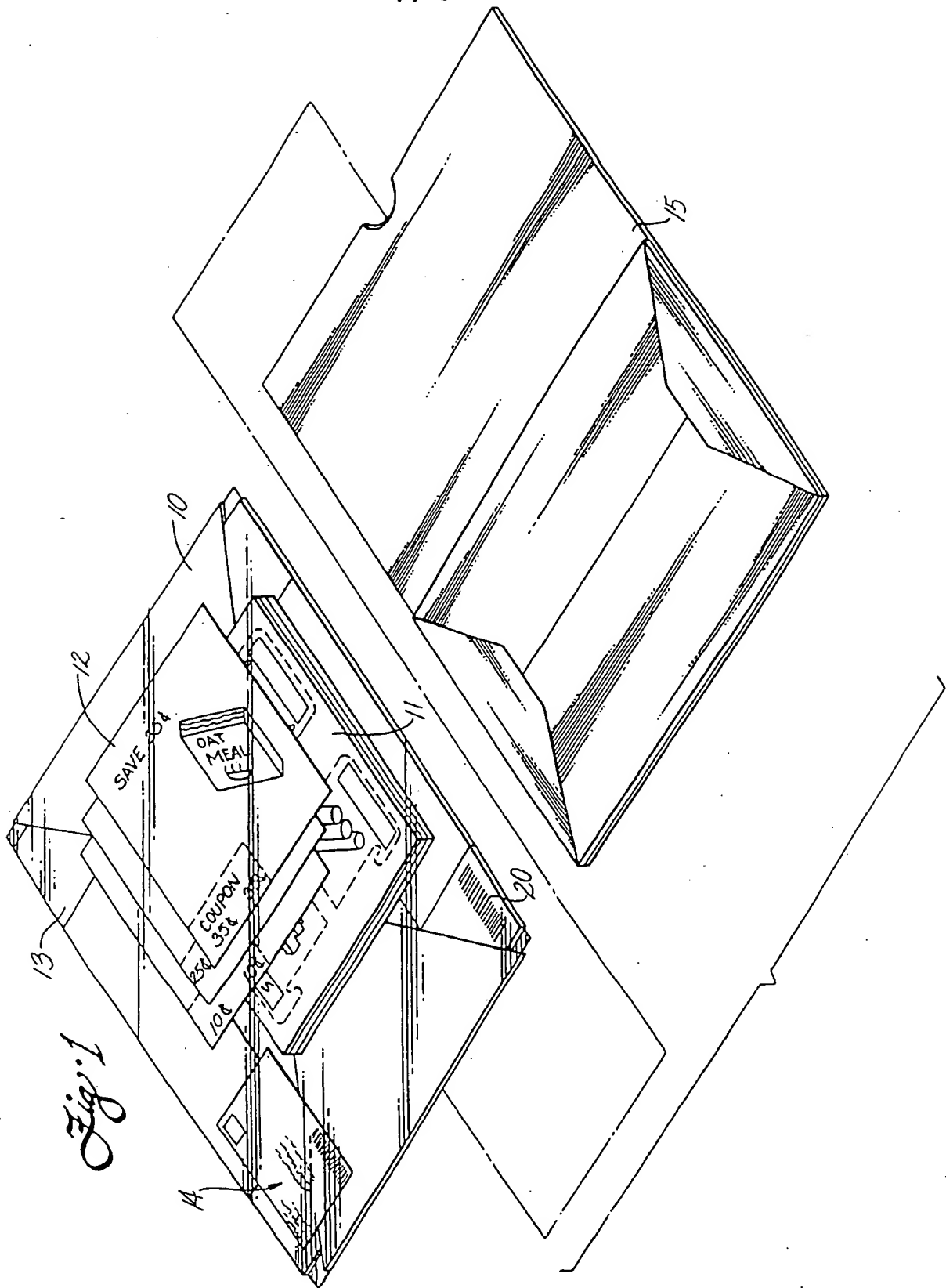
24. A consumer-device kit as recited in claim 21 further comprising a plastic wrap surrounding and holding together the component parts to provide an integrated kit of component parts.

25. A kit as recited in claim 21 wherein the divider cards in the divider sheets are defined by perforations in the divider sheet so that the divider cards can be removed from the divider sheets.

26. A kit as recited in claim 21 wherein each divider sheet defines four divider cards.

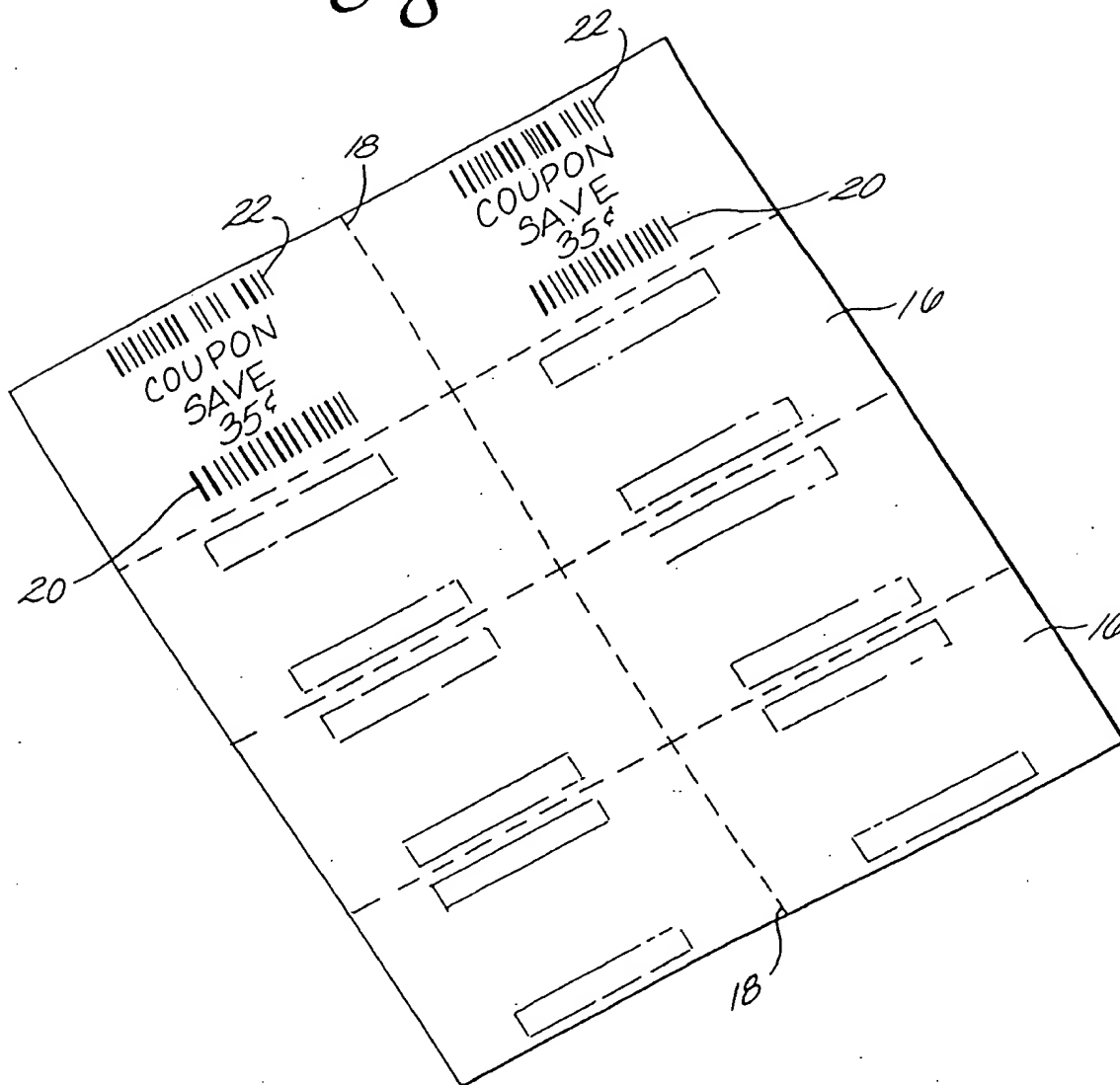
27. A kit as recited in claim 24, additionally comprising a registration card secured to the outside of the cover, the bar code being printed on the registration card.

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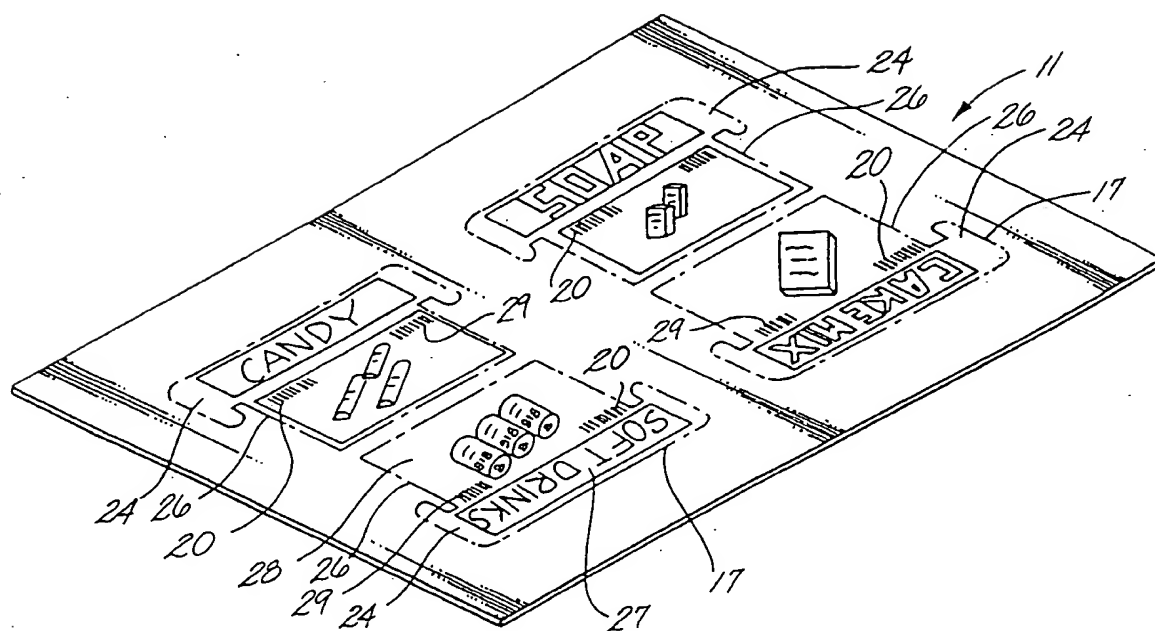


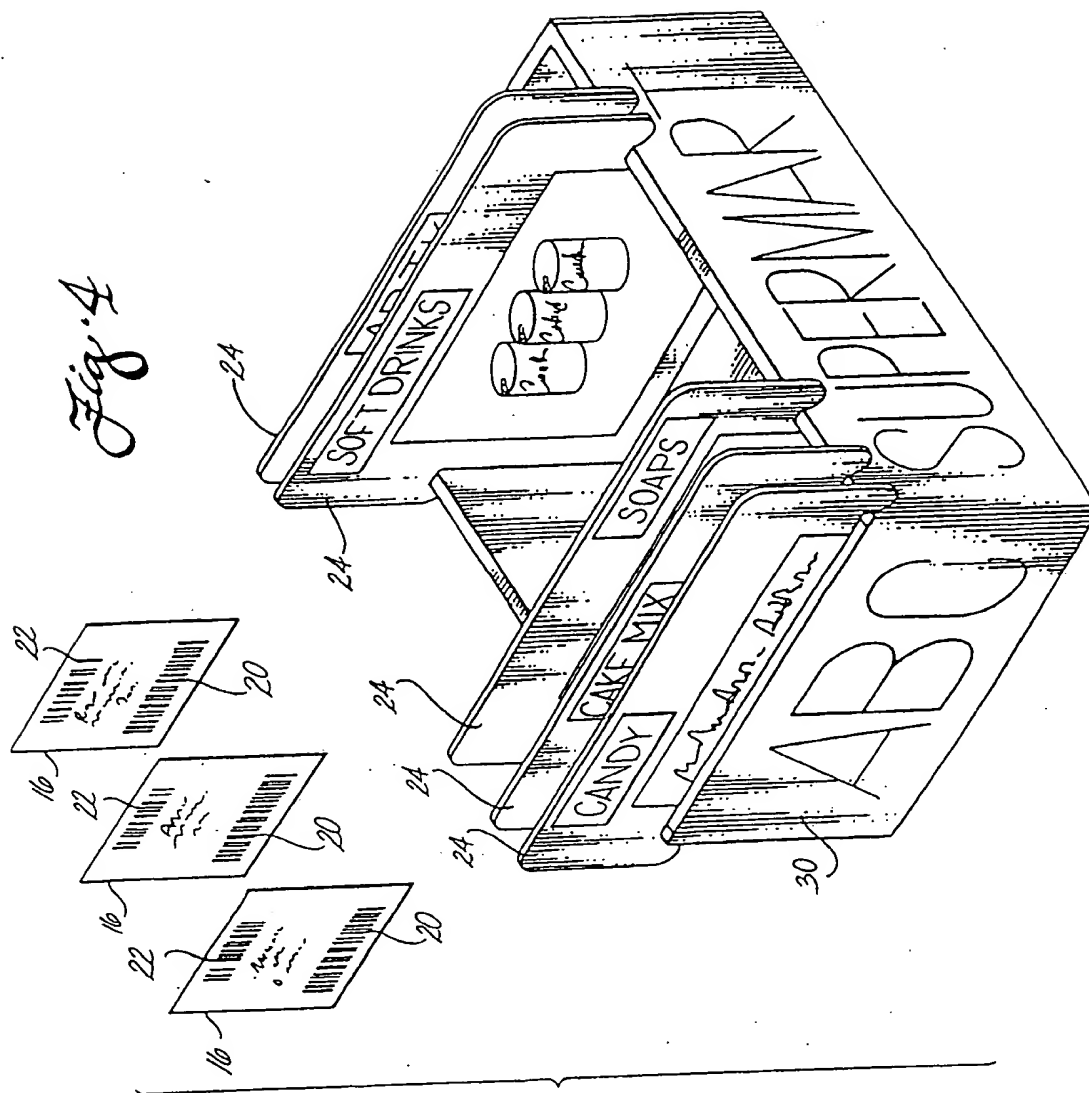
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*Fig. 2*



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*Fig. 3*



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*Fig. 5*

*POSTAGE PAID*


*VALUE SAVERS UNLIMITED  
REGISTRATION CARD  
1234 MAIN ST.  
SOMEWHERE IN U.S.*

*VALUE SAVERS UNLIMITED  
REGISTRATION CARD*

*NAME:* \_\_\_\_\_

*ADDRESS:* \_\_\_\_\_

*CITY:* \_\_\_\_\_

20


*ZIP CODE:* \_\_\_\_\_

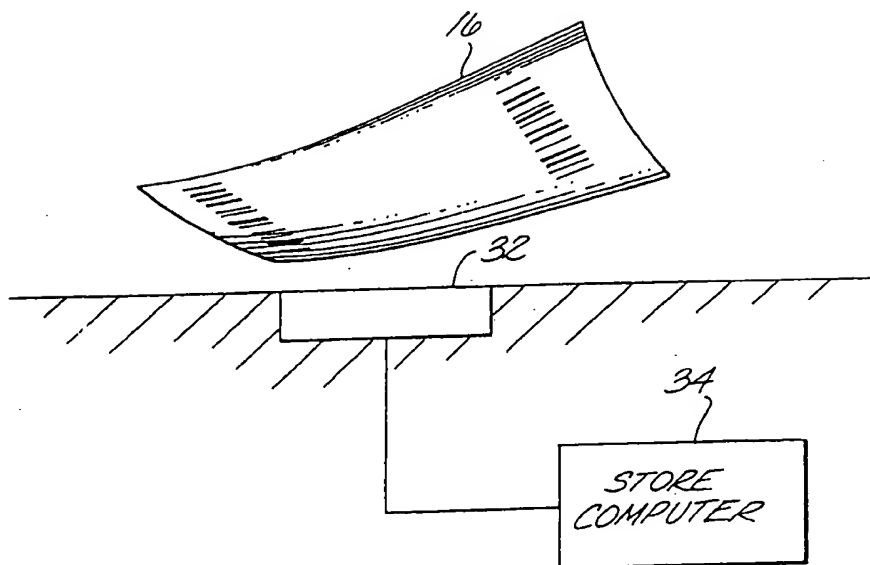
*FAMILY SIZE:* \_\_\_\_\_

14



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*Fig. 6*



# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US94/05605

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(S) : G06F 15/20; G06K 15/00

US CL : 235/375, 383

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 235/375, 383

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

APS: search terms: coupon, bar code

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US, A, 4,795,196 (HYUN ET AL) 03 JUNE 1989, col. 5, line 40 to col. 6, line 41.	1-10
Y	US, A, 5,039,075 (MAYER) 13 AUGUST 1991, col. 1, lines 32-46 and col. 4, lines 31-38.	1-27
Y	US, A, 5,060,793 (HYUN ET AL) 29 OCTOBER 1991, col. 4, line 60 to col. 6 line 22.	11-27
A	US, A, 4,908,761 (TAI) 13 MARCH 1990.	1-27

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	* T	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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